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EXAMINER	
BOYCE, ANDRE D	
ART UNIT	**PAPER NUMBER**
3623	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/476,711	MCGOVERAN, DAVID O.	
	Examiner	Art Unit	
	Andre Boyce	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *31-111* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *31-111* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Final office action is in response to Applicant's amendment filed October 26, 2004. Claims 1-30 have been canceled. Claims 31-111 have been added.

2. The previously pending new matter objection to the specification under 35 USC 132 has been withdrawn.

The previously pending rejections to claims 16-31 under 35 USC § 112, first paragraph have been withdrawn.

The previously pending rejections to claims 19, 23, and 26 under 35 USC § 112, second paragraph have been withdrawn.

Specification

3. The disclosure is objected to because of the following informalities: the Brief Description of the Drawings is missing. Appropriate correction is required.

Claim Objections

4. Claims 33 and 39-43 are objected to because of the following informalities: These claims depend from claim 1, a canceled claim. For purposes of examination, the Examiner will assume the claims depend from claim 31. Appropriate correction is required.

Claim Rejections - 35 USC § 101

5. Claims 31-110 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

(1) whether the invention is within the technological arts; and

(2) whether the invention produces a useful, concrete, and tangible result.

First, for a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts. In the present case the independent claims 31 and 110 only recite an abstract idea. The recited steps of declaring and stating an objective, declaring and stating at least one objective rule set, delegating to at least one specific actor, etc. does not involve, use, or advance the technological arts (i.e., computer, processor, electronically, etc.), since the steps could be performed using pencil and paper.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention is a "reasoning paradigm", as described by Applicant, and produces no

concrete result. This reasoning paradigm (i.e., claimed invention) is subjective, whereby the result is neither assured nor repeatable.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 31-87 and 93-111 are rejected under 35 U.S.C. 102(a) as being anticipated by Tinnirello (Project Management, July 1999).

As per claim 31, Tinnirello discloses a business method for actively managing a first dynamic process (e.g., project management, pg 3) comprising: declaring and stating an objective of said first dynamic process as a set of measurable goals and constraints (e.g., breaking down project into measurable tasks, pg 4); declaring and stating, for the purpose of accomplishing at least a part of said objective, at least one objective rule set having a plurality of rules: wherein the rules in said objective rule set may act in any order subject to the limitation that, for any specific rule in said objective rule set, that specific rule's condition and applicable constraints must be satisfied before that specific rule's action may occur (e.g., determining inter-task dependencies, pg 4); delegating to at least one specific actor: at least a first subordinate objective, subordinate to the objective, stating the first subordinate objective as a subset of subordinate, measurable goals and subordinate constraints',

a set of rules for accomplishing said first subordinate objective; at least one rule stating both authority and accountability for attaining the subordinate, measurable goals of said first subordinate objective, and, at least one rule stating the responsibility and accountability for attaining the subordinate, measurable goals of said first subordinate objective subject to the constraints and subordinate constraints (e.g., assigning a resource, such as an employee to the measurable task, along with the determined inter-task dependencies, pg 5); determining the satisfaction of any rule's condition and triggering the occurrence of said rule's action (i.e., determining the type of inter-task dependency, including the predecessor and successor tasks, pg 4); wherein said rule's condition includes measurable values from at least one member of a set of sources; and, said set of sources comprise a source internal to said dynamic process, a source external to said dynamic process, and a source in the real world (i.e., measurable values include the completion of predecessor tasks which trigger the successor tasks, pg 4); modifying at least one element through the action of at least a rule whose condition is triggered by at least one input from an event in the real world (e.g., refinement of the project plan, including adjustment of task dependency, pg 6); giving each element, and each of the steps of declaring and stating, delegating, and modifying, a declarative and therefore non-procedural representation (e.g., software implementation of project management, pg 6).

As per claim 32, Tinnirello discloses iterating at least one of the steps of declaring and stating, delegating, determining, and modifying (e.g., revising and updating project status, pg 7).

As per claim 33, Tinnirello discloses the step of redeclaring and restating at least one action of at least one rule as a second dynamic process (e.g., refinement, including adjusting the delay or overlap of task dependencies, pg 6).

As per claim 34, Tinnirello discloses the dynamic process represents a business's operational flow (i.e., project plan).

As per claim 35, Tinnirello discloses adding at least one new element to the dynamic process in response to at least one input (i.e., adding a task).

As per claim 36, Tinnirello discloses using the measurable goals and measurable values to assess at least one member of a set of assessments, that set of assessments comprising risk of error, minimum contribution of any rule to the goal, maximum contribution of any rule to the goal, risk of deviation from the goal due to the action of any rule, performance of at least one actor, and relative efficiencies among any two actors (i.e., risk management, including identification, analysis, and mitigation, pgs 51-52).

As per claim 37, Tinnirello discloses using the deviation of measured values from measurable goals for at least one member of a set comprising accounting control, regulatory control, and reporting (e.g., calculation of variances, including budget and cost variances, pg 9).

As per claim 38, Tinnirello discloses said dynamic process forms a business autopilot (e.g., project plan management is able to determine overall completion of the project and determine status at any time).

As per claim 39, Tinnirello discloses including a set of constraints consisting of at least one constraint; including a first rule consisting of at least a first rule; including a second rule set consisting of at least a second rule; and, including a set of ordering rules consisting of at least one ordering rule; wherein the relative order by which each rule in the first rule set and at least a second rule in the second rule set are satisfied is determined according to at least one member of a set comprising the set of constraints, implicit rule precedence making the action of each rule in the first rule set satisfy a condition of the second rule, the set of constraints, and the set of ordering rules (e.g., determining inter-task dependencies, including determining predecessor and successor tasks, pg 4).

As per claim 40, Tinnirello discloses declaring and stating at least a first rule set and a second rule set, wherein the second rule set is subordinate to the first rule set, and wherein the second rule set inherits from the first rule set at least one condition of a rule in the first rule set as a constraint on the second rule set and at least one action of a rule in the first rule set as a goal of the second rule set (i.e., sub-tasks or dependent task).

As per claim 41, Tinnirello discloses declaring and stating at least a first rule set and a second rule set, wherein the second rule set is subordinate to the first rule set, and wherein at least one change in constraints by action of at least one rule of the second rule set is passed to the first rule set (i.e., sub-tasks or dependent task, wherein a change in the first task timing affects the subordinate sub-task timing, pg 4).

As per claim 42, Tinnirello discloses said declarative representation is at least one member of a representation set comprising symbolic logic and computer language (e.g., project management software, wherein the tasks and corresponding timelines are represented by mathematical representations).

As per claim 43, Tinnirello discloses wherein for at least one rule: the condition of said rule detects a difference between at least one element of said dynamic process and a measurable value from at least one input, and the action of said rule has an affect on at least that one element of said first dynamic process by modifying that one element to do at least one member of a response set comprising accommodate the measurable value, and adjust performance of said dynamic process as indicated by the measurable value (e.g., calculation and evaluation of variances, including costs, pg 9).

As per claim 44, Tinnirello discloses measuring the deviation of measurable values from measurable goals to analyze the efficiency of a business operation (i.e., calculation of variances, pg 9).

As per claim 45, Tinnirello discloses incorporating a set of resolving constraints comprising at least one member of a resolving set comprising a resolving constraint and a resolving rule; and, incorporating at least one ambiguous rule; wherein said resolving set determines whether the action of said ambiguous rule will be triggered when the evaluation of a condition is a value that is not true and is not false (e.g., task inter-dependency, wherein subsequent tasks are triggered based upon task relationships).

As per claim 46, Tinnirello discloses in the step of delegating, at least one member of what is delegated to one specific actor is a consequence of the rules, constraints, and measurements assigned to an actor (e.g., assigning of resources, including resource leveling, pgs 5-6).

As per claim 47, Tinnirello discloses at least one element maintains consistency among any combination of authority to act, responsibility, response to operational failure, and accountability (e.g., executive level functions, pg 100).

As per claim 48, Tinnirello discloses at least one rule makes explicit why actions are undertaken and what is to be achieved (i.e., objective, including a specific measurable benchmark that the project must achieve towards accomplishing goals, such as tasks pg 394).

As per claim 49, Tinnirello discloses a first rule is replaced by a set of refinement rules that include at least the action of the first rule without the set of refinement rules including the first rule (e.g., related objectives).

As per claim 50, Tinnirello discloses incorporating a first risk of error associated with the first rule; incorporating a second risk of error associated with a second rule belonging to the set of refinement rules; wherein the second rule has the least risk of error of any rule in the set of refinement rules; and wherein the second risk of error is not greater than the first risk of error (i.e., risk analysis, pg 55).

As per claim 51, Tinnirello discloses the step of declaring and stating at least one objective rule set comprises stating at least a first objective rule set and a second objective rule set, wherein the first objective rule set operates at a first level of the

dynamic process and the second objective rule set operates at a second level of the dynamic process (e.g., division of project into executive level, project level, and team level functions, pgs 100-105).

As per claim 52, Tinnirello discloses said first and second levels are indistinct and said first objective rule set and said second objective rule set form a peer to peer organization (e.g., project management communication structure, pg 101).

As per claim 53, Tinnirello discloses said first and second levels are distinct and said first objective rule set and said second objective rule set form a hierarchical organization (e.g., project management communication structure, pg 101).

As per claim 54, Tinnirello discloses declaring and stating at least a first rule set and a second rule set, wherein the second rule set is subordinate to the first rule set, and wherein the first rule set further receives, from the second rule set, the result of an action by a rule of the second rule set as satisfaction of at least one condition of a rule of the first rule set (e.g., determining inter-task dependencies, including determining successful completion of predecessor a task, pg 4).

As per claim 55, Tinnirello discloses the first rule set further comprises at least a superior objective and wherein the action of the second rule set conveys information to the first rule set sufficient for the first rule set to alter at least the superior objective when the superior objective does not conform to a measurable value from the real world (e.g., a task that includes a sub-task).

As per claim 56, Tinnirello discloses including at least a second rule set comprising a set of rules that are connected such that there is no rule for which both

its condition is not satisfied by some combination of actions and events, and its action does not eventually in combination with the actions of other rules in the set satisfy the conditions of at least one rule; including at least a first rule in said second rule set whose condition has been satisfied at least once; and, further including a set of pairs comprising an identification of a satisfied rule and a time said satisfied rule was satisfied, said set of pairs being partially ordered and constituting a first subordinate process (e.g., sub-tasks that make up the overall task/objective, wherein the rules of the sub-tasks inherently affect the overall task/objective).

As per claim 57, Tinnirello discloses the second rule set comprises the entire set of satisfied rules of the first dynamic process and no explicit ordering of the rules in the second rule set is provided in defining said first dynamic process (e.g., sub-tasks inherently contain rules of overall task).

As per claim 58, Tinnirello discloses said set of rules includes at least one anticipatory rule, the satisfaction of the condition portion of said anticipatory rule being merely a possibility when said rule is initially stated (e.g., sub-tasks inherently contain rules of overall task).

As per claim 59, Tinnirello does not explicitly disclose said condition of said anticipatory rule incorporates at least one conjunct which, at the time of creation of the rule, incorporates a measurable value that is contrary to the known and projected state of the real world (e.g., objective of task that may be assigned to incorrect resource or outside scope of resources available).

As per claim 60, Tinnirello discloses storing said representation in a static and stable form so as to preserve human knowledge of said dynamic process (e.g., baseline view of project objectives and tasks, pg 7).

As per claim 61, Tinnirello discloses the steps of organizing in a first business entity said representation of said dynamic process for conveyance to a second business entity, and, conveying said representation from the first business entity to the second business entity (e.g., project plan conveyed to various entities within and outside the organization, as seen in the project communication structure, pg 101).

As per claim 62, Tinnirello discloses said representation of said dynamic process stores knowledge of at least one member of a set comprising organizational management, at least one model of business organization, at least one operational process, and at least one strategic process (e.g., executive level, project level functions, and team level functions pgs 100-105).

As per claim 63, Tinnirello discloses retrieving at least a portion of said representation, and, instantiating said portion of said representation as a second dynamic process in a business (e.g., completion of sub-tasks related to the overall objective or goal).

As per claim 64, Tinnirello discloses the step of delegating to at least one specific actor further comprises: a first actor at a first level stating a plurality of business rules comprising possible conditions, each condition comprising at least one member of a set comprising factual circumstance, market situation, business event, and measurable value, and joined with at least one corresponding desired action

matching a first measurable goa1; a second actor at a second level identifying a goal-achieving set of business rules whereby said first measurable goal may be attained and; said second actor communicating at least a first result of the goal-achieving set of rules to said first actor (i.e., assigning resources to tasks/objectives, including executive-level, project level, team level, and analyst level, including communication structure, pgs 5 and 100-105).

As per claim 65, Tinnirello discloses said plurality of business rules are responsive to a plurality of events, and wherein the actual operation of the plurality of business rules are combined to form a business process independent of any pre-existing definition of the business process (e.g., combination of tasks to complete a specific project objective or goal, pg 394).

As per claim 66, Tinnirello discloses said measurable goal is expressed as at least one goal rule comprising a goal condition which identifies said measurable goal and a goal action which specifies any combination of the members of a measure set consisting of a measure of success, a measurement constraint, and a measure of failure (e.g., post implementation review, pg 9, including a measurement program, pg 410).

As per claim 67, Tinnirello discloses the first actor further: identifies the maximum acceptable risk associated with each rule in a first rule set at the second level; determines the risk associated with each rule; and, for each rule in rule set with risk that is not below the maximum acceptable risk associated with said rule, further

refines actions of each such rule by delegating its actions as a goal to a rule set at a third level (i.e., risk management, including risk analysis, pgs 55-56).

As per claim 68, Tinnirello discloses the step of communicating further comprises stating at least one rule having at least one condition responsive to said desired action and having an action that performs said step of communicating (e.g., task/objective dependency).

As per claim 69, Tinnirello discloses said first result is a qualitative measure of at least one member of a set of measurable properties comprising performance and goal completion (e.g., goal/objective/task measurement, pg 410).

As per claim 70, Tinnirello discloses said first actor delegates to at least one subordinate actor any combination of any number of the members of a delegation set consisting of responsibility, accountability, and authority that belong to the first actor (e.g., executive level function, including delegation, pgs 100-101).

As per claim 71, Tinnirello discloses said delegation is established by a delegation rule comprising at least one delegation condition which tests the appropriateness of achieving said desired action and at least one action which identifies at least one actor as recipient of said delegation (e.g., delegation based upon resource availability, pg 100).

As per claim 72, Tinnirello discloses a delegation rule comprising a delegation condition and a delegation action delegates authority by at least one member of a set comprising establishing, modifying, and deleting at least one rule set (e.g., executive level delegation to project level members).

As per claim 73, Tinnirello discloses said second actor delegates authority by at least one member of a set comprising establishing, modifying, and deleting at least one rule set (e.g., project level delegation to team level members).

As per claim 74, Tinnirello discloses said delegation of accountability is accomplished by enabling at least one member of a set, comprising said second actor and said second rule, to alter at least one member of a set comprising measurement of predefined success and measurement process (e.g., project level functions, including project management, pg 103-104).

As per claim 75, Tinnirello discloses identifying a second actor according to a goal stated as a set of requirements rules and a set of requirements constraints, and according to measurements stated as a set of capabilities rules (e.g., assigning tasks/objectives to analysts and doers based on expertise, pg106-107).

As per claim 76, Tinnirello discloses each requirement rule in said set of requirements rules comprises at least one requirements condition identifying at least one member of a set comprising the desired action and at least one capability required to accomplish said desired action and at least one requirements action identifying at least one member of a set comprising at least one capability of said second actor and said desired action (i.e., project manager identification of resource able to complete task/objective).

As per claim 77, Tinnirello discloses each capability rule in said set of capabilities rules consists of at least one member of a set comprising: at least one capabilities condition identifying at least one actor and at least one capabilities action identifying

at least one capability of said actor; and, at least one capabilities condition identifying at least one capability, and at least one capabilities action identifying at least one actor having said capability (i.e., determining resource capable of achieving objective of the task).

As per claim 78, Tinnirello discloses a step of matching said second actor with said desired goal by at least one criteria for comparing at least one requirements rule and at least one capabilities rule (i.e., determining resource capable of achieving objective of the task).

As per claim 79, Tinnirello discloses said criteria establishes at least one member of a match set comprising a best fit match, a fuzzy match, an approximate match, and an exact match (i.e., determining resource capable of achieving objective of the task, including scenario where resources are limited, allowing for less than exact match).

As per claim 80, Tinnirello discloses the step of modifying at least one element through the action of at least a rule whose condition is triggered by at least one input from at least one real world event in the real world, further comprises: defining a first adaptation process comprising at least one adaptation rule; constructing said adaptation rule such that; its action is at least one member of a set of actions comprising element creation, self-modification, feedback, contradiction resolution, conflict resolution, correction for failure, and decision making; satisfying the condition of the adaptation rule through an event; and, affecting at least one element through

the action of the adaptation rule (e.g., refinement of the project plan, wherein refinement affects project tasks/objectives and resources used, pg 6).

As per claim 81, Tinnirello discloses said first adaptation process is independent of any external agent (e.g., internal review of project plan).

As per claim 82, Tinnirello discloses monitoring performance by and against specific metrics; wherein the condition of the adaptive rule is satisfied by performance deviations from the specific metrics; and the action of the adaptive rule is representative of at least one member of a set comprising business events, business measures, business decisions, business rules, and business processes (i.e., evaluation of project performance, pg 391).

As per claim 83, Tinnirello discloses an adaptation rule that is stated such that, when its condition is satisfied, its action modifies at least a first rule instantiated at a first level such that the first rule effectively modifies at least a first goal of the first level, without requiring intervention from a higher level (e.g., sub-tasks goals/objectives determined and accomplished at the analyst level, in order to accomplish larger objective/goals of superior tasks).

As per claim 84, Tinnirello discloses continuously monitoring for at least one occurrence of the at least one real world event; and, continuously modifying the elements of the dynamic process, in response to the occurrence of the at least one real world event (e.g., continuous revision of the project plan, whereby tasks/objective can be modified based on changing conditions and/or resources).

As per claim 85, Tinnirello discloses incorporating at least one member of a set of dynamic processes comprising creation, deletion, modification, and correction of both objectives and elements; linking the adaptation process to at least one member of the set of dynamic processes and, modifying the objectives and elements by the adaptation process according to at least one member of a set comprising conditions and constraints (e.g., continuous revision of the project plan, whereby tasks/objective can be modified based on changing conditions and/or resources).

As per claim 86, Tinnirello discloses the step of changing at least one element comprises: detecting a contradiction; changing at least one rule set, further comprising; identifying at least a first and second conflicting rule; and, resolving the contradiction by at least one member of a set comprising adding a new constraint, altering a existing constraint, adding a new rule, altering at least one of the first and second conflicting rules, and eliminating at least one of the first and second conflicting rules; so as to logically differentiate the actions of the first and second conflicting rules (e.g., adding, removing, modifying tasks and/or objectives).

As per claim 87, Tinnirello discloses reducing at least one operational latency in the dynamic process through the action of the adaptation rule (e.g., elimination or combination of a task).

As per claim 93, Tinnirello discloses said adaptation rule is stated such that its condition is satisfied when a first failure occurs and its action corrects for the first failure by modifying at least one element (e.g., task/objective not completed, wherein goal/objective must be modified).

As per claim 94, Tinnirello discloses the first failure comprises not attaining a first goal and the modification of at least one element enables the first goal to be attained by correcting at least one member of a set comprising at least one cause of the first failure and at least one effect of the first failure (e.g., determining the effect of not completing the task/objective and how it affects the subsequent/successor tasks and objectives).

As per claim 95, Tinnirello discloses the modification of at least one element includes at least one member of a set of steps comprising creating, modifying, and deleting a second adaptation rule (e.g., creation and/or modification of a current or subsequent task).

As per claim 96, Tinnirello discloses the first failure comprises not detecting a measurable value and the modification of at least one element comprises at least one member of a set comprising creating the element, modifying the element, and deleting the element (e.g., creation and/or modification of a current or subsequent task).

As per claim 97, Tinnirello discloses a second failure comprises not attaining a second goal and the modification of at least one element includes the step of redeclaring and restating at least one action of at least one rule as a second dynamic process (e.g., modification of a task and/or goal).

As per claim 98, Tinnirello discloses the first failure comprises not attaining a first goal and said modification enables said first goal to be attained by correcting at least one member of a failure set comprising at least a first cause of the first failure and at

least a first effect of the first failure (e.g., modification of a task/objective in order to meet the goal).

As per claim 99, Tinnirello discloses when the adaptation rule's condition is satisfied its action modifies at least a first rule of the objective rule set so that, when the first rule's condition is satisfied, the first rule's action modifies at least a first member of the set of measurable goals without human intervention (e.g., project management software updating the progress of task completion and dependency).

As per claim 100, Tinnirello discloses when the adaptation rule's condition is satisfied, its action modifies at least a first rule of a set of rules so that when the first rule's condition is satisfied, the first rule's action modifies, without human intervention and without modification of any rule of the objective rule set, at least a first member of a set comprising subordinate goals and measurable goals (e.g., modification of sub-tasks based on overall task/objective modification).

As per claim 101, Tinnirello discloses the step of declaring and stating at least one objective rule set further comprises: stating at least a first objective rule set and a second objective rule set, wherein the first objective rule set operates at a first level of the dynamic process and the second objective rule set operates at a second level of the dynamic process; and wherein the adaptation rule's condition effectively defines the need for a closed loop effect in said first level and the adaptation rule's action changes at least one element in said second level (e.g., task inter-dependency, which determines completion of objectives).

As per claim 102, Tinnirello discloses the step of changing at least one element comprises changing at least one member of a set comprising goal, rule, rule set, condition, action, constraint, measurable value, and delegation (e.g., modification of a goal based on task-interdependency modification).

As per claim 103, Tinnirello discloses the step of declaring and stating at least one objective rule set comprises stating at least a first objective rule set and a second objective rule set: wherein the first objective rule set operates at a first level of the dynamic process and the second objective rule set operates at a second level of the dynamic process; and wherein a first goal is associated with the first level and a second goal is associated with the second level; and the first goal and the second goal overlap (e.g. task inter-dependency).

As per claim 104, Tinnirello discloses using the overlap to avoid at least one member of a set comprising confrontation problems and race-condition problems (e.g., overlap of tasks).

As per claim 105, Tinnirello discloses the step of declaring and stating at least one objective rule set comprises stating at least a first objective rule set and a second objective rule set, wherein the first objective rule set operates at a first level of the dynamic process and the second objective rule set operates at a second level of the dynamic process, and further comprising an organizing rule comprising: an organizing condition; and an organizing action, whereby the organizing condition is satisfied by the condition of at least one rule in said first objective rule set and the

organizing action comprises at least the second objective rule set (e.g., task inter-dependency, including relationship of successor and predecessor tasks).

As per claim 106, Tinnirello discloses said organizing action delegates at least one member of the set comprising a rule set, authority, accountability, and responsibility, so that said organizing rule creates a delegation hierarchy (e.g., determination of resources, including delegation by executive level members to project level members).

As per claim 107, Tinnirello discloses the step of declaring and stating at least one objective rule set further comprises stating at least a first objective rule set and a second objective rule set, wherein the first objective rule set operates at a first level of the dynamic process and the second objective rule set operates at a second level of the dynamic process, and wherein the response to at least one action of at least one rule in the first rule set becomes at least one condition of at least one rule in the second rule set (e.g., sub-tasks with related task inter-dependencies, that affect the overall task and objective, including the superior inter-dependencies).

As per claim 108, Tinnirello discloses the first level and the second level are identical, and at least one rule in the first rule set receives at least one response of at least one rule in the second rule set as its condition (e.g., tasks may redundant).

As per claim 109, Tinnirello discloses the step of changing at least one objective rule set comprises changing at least one rule (e.g., changing an objective, which in turn changes the tasks and inter-dependencies).

As per claim 110, Tinnirello discloses a business method comprising defining a dynamic process (e.g., project management, pg 3) comprising: specifying a set of at least two ordered rules (i.e., at least two related tasks, including determination of task inter-dependencies), wherein the action of a first rule triggers the condition of a second rule, and all rules in the set form a partially ordered set wherein actions of preceding rules trigger conditions of subsequent rules (i.e., inter-dependency of tasks trigger successor tasks); wherein said dynamic process is the set of possible conditions and actions of said partially ordered set of rules (e.g., task relationships).

Claim 111 is rejected based upon the rejection of claim 1, since it is the apparatus claim corresponding to the method claim.

Claim Rejections - 35 USC § 103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 88-92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tinnirello (Project Management, July 1999), in view of Davis et al (The Information System Consultant's Handbook, December 1998).

As per claims 88-92, Tinnirello does not explicitly discloses the adaptation rule is stated such that its condition is satisfied when a first contradiction occurs and the adaptation rule's action modifies at least one element, the first contradiction comprises at least a first and second logically-conflicting elements, modification of selected elements, the first contradiction comprises at least a first and second

logically-conflicting element, and the adaptation rule's action alters at least one of the first and second logically-conflicting elements, wherein the adaptation rule's action alters at least one of the first and second logically-conflicting elements. Davis et al disclose reformalization, including reformalizing any key concepts, sub-problems, and information flow (7.4.2.3, page 51), including contradictions that may occur based on applicable rules. Both Tinnirello and Davis et al are concerned with effective project management, wherein Tinnirello teaches management of large scale IS projects (pg 99), therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include re-formalization of key concepts, based upon contradiction in Tinnirello, as seen in Davis et al, as effective means of determining contradictions and modifying rules as a result, thereby making the project management in Tinnirello more flexible and robust.

Response to Arguments

10. The Examiner respectfully maintains the 35 USC § 101 rejections with respect to claims 31-111, and re-submits that the recited steps of declaring and stating an objective, declaring and stating at least one objective rule set, delegating to at least one specific actor, etc. does not involve, use, or advance the technological arts (i.e., computer, processor, electronically, etc.), since the steps could be performed using pencil and paper. Additionally, the claimed invention is a "reasoning paradigm", as described by Applicant, and produces no concrete result. This reasoning paradigm

(i.e., claimed invention) is subjective, whereby the result is neither assured nor repeatable.

The Examiner also submits Tinnirello (in view of Davis et al) as teaching Applicant's invention. Further, both Tinnirello and Davis et al are concerned with effective project management, wherein Tinnirello teaches management of large scale IS projects (pg 99), thus providing motivation for the combination.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Boyce whose telephone number is (703) 305-1867. The examiner can normally be reached on 9:30-6pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

adb
January 10, 2005

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PRIMARY EXAMINER
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